

## MAKING SPACE ACCESSIBLE THROUGH ADVANCED RESEARCH TECHNOLOGY

## Short Arm Human Centrifuge

The weight-bearing bones and muscles of astronauts and space tourists deteriorate in the zero-gravity environment in space. The zero-gravity environment also weakens their cardiovascular system. Scientists use the Short Arm Human Centrifuge (SAHC) to study the effects of artificial gravity and hypergravity on the human body. The SAHC helps the scientists to develop training and testing methods that minimise the negative effects of the zero-gravity environment on the physical condition of humans.

AMST designed and built the SAHC known as ":enviFuge" for the German Aerospace Center (DLR). NASA, DLR and ESA are currently conducting the collaborative study AGBRESA (Artificial Gravity Bed Rest – European Space Agency) using the :enviFuge.

## **DESDEMONA**

DESDEMONA is the world's first flight simulator which combines 6 DOF with unlimited attitude control, and that allows sustained G-loading.

This makes DESDEMONA an extremely powerful, versatile, and advanced tool for motion-based research, and for training of pilots and astronauts.

DESDEMONA is the perfect platform to provide a realistic space flight experience including sustained G-forces and unusual attitudes.



